

Exercises for Fall 2025 MATH 2301 Sections 100, 110, 120 (Barsamian)

(from Stewart Essential Calculus Early Transcendentals 2nd Edition)

Your goal should be to write solutions to all of the 392 exercises in this table.

Section	Exercises (<u>Underlined</u> exercises are <u>not</u> in WebAssign.)																	Total
Diagnostic Test A: Algebra	1	2	3	4	5	6	7	8	9	10								10
Diagnostic Test B: Analytic Geometry	1	2	3	4	5													5
Diagnostic Test C: Functions	1	2	3	4	5	6	7											7
Diagnostic Test D: Trigonometry	1	2	3	4	5	6	7	9										8
1.3 The Limit of a Function	1	5	7	10	11	12	<u>13</u>	15	16									9
1.4 Calculating Limits	5	7	10	11	17	21	23	25	27	31	33	35	38	42	49	51	55	17
1.5 Continuity	3	5	7	<u>17</u>	19	27	33	39	43	47								10
1.6 Limits Involving Infinity	1	5	7	9	10	13	19	21	25	29	33	35	40	41	45	49		16
2.1 Derivatives & Rates of Change	1	5	7	<u>9</u>	11	15	16	18	25	27	29	31	33	35	43	47		16
2.2 The Derivative as a Function	1	3	5	9	11	13	19	20	22	23	25	33	35	39				14
2.3 Basic Differentiation Formulas	1	7	9	11	13	19	<u>27</u>	29	31	33	35	37	39	45	50	57	69	17
2.4 The Product & Quotient Rules	3	5	7	13	16	17	19	21	26	27	31	34	37	41	51	<u>55</u>		16
2.5 The Chain Rule	1	7	13	14	17	21	25	35	43	47	51	55	63	64				14
2.6 Implicit Differentiation	5	7	9	11	13	19	21											7
2.7 Related Rates	4	5	11	13	15	20	23	25	27	28	31							11
2.8 Linear Approx & Differentials	1	5	6	11	13	17	19	21	23									9
3.1 Exponential Functions	1	5	7	9	13	15	16	17	<u>23</u>	<u>24</u>	<u>25</u>	27	29	30				14
3.2 Inverse Functions, Logarithms	5	7	9	11	15	17	18	22	23	25	35	36	<u>39</u>	67	71	76		16
3.3 Derivs of Log. & Exp. Funct.	1	3	4	6	13	20	26	31	35	41	45	55	57					13
3.4 Exponential Growth & Decay	1	2	3	9	13	16												6
3.5 Inverse Trig Functions	1	2	3	5	6	9	17	19	21									9
3.7 L'Hospital's Rule	1	2	3	4	18	21	25	26	31	35								10
4.1 Maximum & Minimum Values	5	9	18	19	21	25	29	35	39	43	47	49						12
4.2 The Mean Value Theorem	1	3	5	7	9	11	13	15	17	23	25							11
4.3 Derivs. & Shapes of Graphs	1	5	7	8	<u>10</u>	13	15	19	23	27	35	37	45					13
4.4 Curve Sketching	1	9	11	13	15	19	31	33	<u>39</u>									9
4.5 Optimization Problems	2	7	<u>9</u>	11	12	15	17	22	25	26	28	30	37	39				14
4.6 Newton's Method	4	7	9	11	13													5
4.7 Antiderivatives	1	2	7	12	13	15	20	27	38	40	43	47	53	55				14
5.1 Areas and Distances	2	3	4	5	9	13	16	18										8
5.2 The Definite Integral	1	3	9	11	15	25	30	<u>31</u>	33	35	39	40	44					13
5.3 Evaluating Definite Integrals	3	7	11	18	26	29	35	51	56	59	61	65	69					13
5.4 The Fund. Thm. of Calculus	1	3	5	6	10	11	15	19	25	27								10
5.5 The Substitution Rule	7	11	13	17	19	23	26	27	33	37	39	44	50	53	55	61		16
Total Number of Exercises From All Sections:																		392

Suggestion: WebAssign does not require that you write stuff down, but you will learn a lot by focusing on your *writing*. Furthermore, having good writing skills will help you succeed on Quizzes and Exams. Study by writing a complete solution to each problem *before* typing the answer into WebAssign. Focus on the clarity of your written solution. Keep your written solutions in a notebook. Compare your written solutions to your Instructors' written solutions in Lectures and Recitations. Find another student, a tutor, the Recitation Instructor, or your Professor to look over your written solutions with you.